

NOTES ON PHORIDÆ FROM SOUTH AFRICA.¹

BY CHARLES T. BRUES.

During the past summer I received from H. K. Munro, Border Entomologist of the Union of South Africa, a small collection of Phoridae obtained by him in the Cape Province.

As he wishes to publish observations on the life-history of some of the species included, I am taking this opportunity to present descriptions of two new species and taxonomic notes on some of the others.

Hypocera vectabilis Brues.

Ann. Mus. Nat. Hungarici, vol. II, p. 1 (1913)

There are numerous specimens of both sexes agreeing in all particulars with this species originally described from Abyssinia. More recently Schmitz has described *Hypocera trinervis*² from Stanleyville, Congo, which he says is related to *H. vectabilis*, and which I cannot distinguish from his description. The single male was taken in a nest of *Sima athiops* on *Barteria fistulosa* and Schmitz thinks that *trinervis* is probably myrmecophilous. The original specimens of *H. vectabilis* were reared from the bodies of dried beetles shipped from Abyssinia to the Hungarian National Museum in Buda-Pest.

Some of Mr. Munro's specimens were "bred from larvæ infesting fruits of *Solanum sodomium*" at Prospect, Komgha, Cape Province, March-April 1923, and others were taken in his office during April and May.

Aphiochaeta picta Lehmann

There are two typical specimens (♂ ♀) collected by Dr. Munro at East London, July 26, 1922 and April 29, 1923. This common palæartic species is known also from America, but it has

¹Contribution from the Entomological Laboratory of the Bussey Institution, Harvard University. No. 235.

²Deutsche entom. Zeits., 1915, p. 498.

not hitherto been reported from Africa (*cf.* Schmitz, *Jaarb. Natuurhist. Genootsch.*, Limburg for 1914, pp. 108-109 (1915) and Brues (*Bull. Wisconsin Nat. Hist. Soc.*, vol. 12, p. 126 (1915).

***Aphiochaeta setifer*, sp. nov.**

♂. Length 1.5 mm. Head and thorax piceous, lower part of front and anterior part of mesonotum fuscous; abdomen black; antennæ fuscous; palpi pale yellowish; legs brownish yellow, the hind femora blackened at tips and their tibiæ with a black line above; hypopygium brownish, pruinose; wings hyaline, with a brownish tinge apically on the disc; venation dark brown. Front slightly but distinctly higher than wide; lower pair of post-antennal bristles very small, half as far apart as the upper pair which are nearly as large as the other frontal bristles and placed almost as far from one another as from the eye margin; bristles of lowest reclinate row with the inner one on a level with the upper post-antennal and one-third way toward the eye, the outer bristle very close to the eye and well above the inner one; upper row evenly spaced with the lateral one close to the eye, forming a slightly curved series across the upper third of the front; ocellar row of four bristles evenly spaced; ocellar triangle clearly elevated and delimited. Antennæ small, oval; arista as long as the eye. Palpi with four long and two short bristles. Proboscis very small. Post-ocular cilia strong, slightly enlarged below, cheek with a pair of strong bristles. Mesonotum highly shining, with one pair of dorso-central bristles; scutellum with a single marginal pair. Abdomen dull, slightly pruinose; second segment elongated, with a couple of weak bristles at each side; fifth and sixth segments sparsely clothed with small black bristles. Hypopygium covered with minute bristles, but with no larger ones; apical lamella short. Ventral side of sixth segment bristly. Propleura along its posterior edge with a series of bristles, enlarged above and near the front coxa; mesopleura bare. Four anterior coxæ conspicuously bristly at tips; hind femora with a series of longer hairs below. Middle tibiæ with a line of seven or eight distinct but delicate

setæ inside the posterior edge; hind tibia with a similar series of seven much larger ones, which are considerably longer than the width of the tibia, excepting the basal two which are much shorter. Costa barely less than four-ninths of the wing length, its bristles long (four times the width of the costal vein) and sparsely placed (five beyond the tip of the first vein); first section of costa slightly longer than the second and third together; third two-thirds the length of the second; second vein emerging from the third at a very acute angle; fourth vein faintly curved at base, straight beyond; fifth and sixth nearly straight; seventh weakly curved, well removed from the margin. Wing rather long and narrow. Halteres with black pedicel and light brown capitulum.

Type from Barberton, Cape Province, South Africa, May 22, 1913.

This species resembles the European *Aphiochæta fuscohalterata* Schmitz, but is at once distinguished by the large bristles on the hind tibiæ. It is similar to *A. decipiens* Wood (= *cilipes* Wood), but the bristling of the hypopygium will readily separate it from that species. It resembles *A. atrita* Brues from Java in color and many characters, but the ciliation of the hind tibia is very much stronger.

***Puliciphora africana* Brues (Fig. 1)**

Ann. Mus. Nat. Hungarici, vol. 5, p. 410, fig. (1907)

Brues, Psyche, vol. 17, p. 36 (1910)

Numerous specimens of both sexes are referable to this species, described from females obtained at Kibosho, German

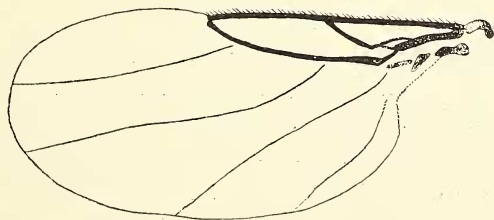


Fig. 1. *Puliciphora africana* ♂ wing.

East Africa. The several species of this quite cosmopolitan genus are extremely similar, and as they are attracted to and probably breed in old cheese, meat and other animal products, some have undoubtedly been widely spread by commerce particularly in the tropics.

To the original description of the female the following may be added from the well preserved specimens sent by Dr. Munro. There are four large divergent supra-antennal bristles, each longer than the diameter of the antenna; the lower pair are proclinate, the upper pair erect or slightly proclinate, set farther apart than the lower ones; above these are ten other bristles, one on each side of the front midway between the upper post-antennals and the eye, a median pair just below the ocelli, an ocellar row of six. The thorax bears six bristles, one at each anterior angle, one at each posterior angle and two very widely separated ones along the posterior margin. Pleura just below the posterior lateral bristle of the mesonotum with a very large bristle that projects laterally. In addition the head, thorax, abdominal plates and legs are rather densely clothed with fine black hairs.

Male. Considerably larger than the female, 1.7-1.8 mm. in length; wings large, approximately as long as the body. Head pale brownish, darker between the ocelli; thorax pale brown above, ochre yellow below; abdomen piceous above, whitish below, the hypopygium piceous, with brownish ventral lamella and pale dorsal one. Front with four supra-antennal bristles: the lower pair close together and clearly proclinate; the upper pair twice as far apart, strongly divergent and nearly correct; above these there are 12 other bristles, a pair slightly above the post-antennals on each side of the front of which the lateral bristle is close to the eye and above the inner one, a pair just below the ocelli, and six forming a series of three pairs on the vertex above the ocelli. Post-ocular cilia much enlarged; cheek with a series of conspicuous forwardly directed bristles forming a line parallel with the lower eye-margin; palpus with about six moderate bristles; proboscis projecting, obtusely pointed, more slender than in the female. Third joint of antenna broadly

ovate, as long as thick and less than half as long as the eye-height; arista apical, faintly pectinate, as long as the front coxa. Mesonotum with one pair of very widely separated dorsocentral bristles and four scutellar bristles of which the median (not lateral) pair is often much smaller. Abdomen clothed with minute, almost imperceptible bristly hairs, more distinct on the apical segment, and enlarged to form a very evident apical row along the posterior margin of the other segments; venter entirely membranous, without hairs or bristles. Central portion of hypopygium pyriform, with a slender, upturned stylet projecting from its tip; dorsal lamella attached at the middle of the middle lobe, with parallel sides, supplied with long sparse bristles; left side with a large plowshaped lamella; ventral middle-piece with a large upturned hook which is spinose inwardly near apex; right side above with a small triangular plate, the apex of which is drawn out into a small finger-shaped piece that bears two long bristles at its tip. Legs rather stout; anterior tibia without spur; others each with a single one; no very distinct tibial setulæ; hind metatarsus with six transverse bands of bristles. Wings with the costa extending distinctly beyond the middle, its bristles close-set, minute, scarcely longer than the diameter of the costal vein; first and second sections of costa equal; mediastinal vein distinct; fourth vein almost straight; fifth curved at base; sixth faintly bisinuate; seventh clearly indicated, close to the anal angle. Halteres very large, with pale stalk and dark-colored knob.

There are numerous specimens of both sexes bred from larvæ in a rotting stem of paw-paw (*Carica papaya*) at East London, Cape Province, February 2, 1922.

From the descriptions above it will be evident that the bristling of the front is different in the sexes, as the female has only one bristle lateral to and just above the post-antennal group of four. I have carefully examined a large number of the minute females and am certain that none of them show more than one bristle in this position.